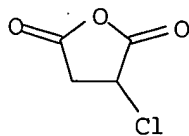


L5 ANSWER 1 OF 1 REGISTRY COPYRIGHT 2005 ACS on STN  
 RN 1192-71-8 REGISTRY  
 ED Entered STN: 16 Nov 1984  
 CN 2,5-Furandione, 3-chlorodihydro- (9CI) (CA INDEX NAME)  
 OTHER CA INDEX NAMES:  
 CN Succinic anhydride, chloro- (7CI, 8CI)  
 OTHER NAMES:  
 CN  $\alpha$ -Chlorosuccinic anhydride  
 CN **Chlorosuccinic anhydride**  
 FS 3D CONCORD  
 DR 7414-69-9  
 MF C4 H3 Cl O3  
 LC STN Files: BEILSTEIN\*, CA, CAOLD, CAPLUS, CASREACT, TOXCENTER, USPATFULL  
 (\*File contains numerically searchable property data)



**\*\*PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT\*\***

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 1 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA  
 12 REFERENCES IN FILE CAPLUS (1907 TO DATE)  
 3 REFERENCES IN FILE CAOLD (PRIOR TO 1967)

=> file caplus

COST IN U.S. DOLLARS	SINCE FILE	TOTAL
	ENTRY	SESSION
FULL ESTIMATED COST	13.74	21.32
DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)	SINCE FILE	TOTAL
	ENTRY	SESSION
CA SUBSCRIBER PRICE	0.00	-0.73

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 FILE LAST UPDATED: 13 Jul 2005 (20050713/ED)

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=> s 1192-71-8/proc  
12 1192-71-8  
3712900 PROC/RL  
L6 0 1192-71-8/PROC  
(1192-71-8 (L) PROC/RL)

=> s 1192-71-8/prep  
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3329153 PREP/RL  
L7 3 1192-71-8/PREP  
(1192-71-8 (L) PREP/RL)

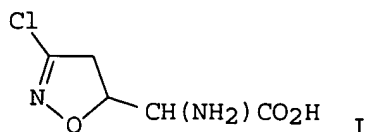
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214772 PUR/RL  
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(1192-71-8 (L) PUR/RL)

=> s l7 and aspartic acid  
64753 ASPARTIC  
4002720 ACID  
55860 ASPARTIC ACID  
(ASPARTIC(W)ACID)  
L9 0 L7 AND ASPARTIC ACID

=> s l7 1-3 ibib abs hitstr  
MISSING OPERATOR L7 1-3  
The search profile that was entered contains terms or  
nested terms that are not separated by a logical operator.

=> d l7 1-3 ibib abs hitstr

L7 ANSWER 1 OF 3 CAPLUS COPYRIGHT 2005 ACS on STN  
ACCESSION NUMBER: 1986:590736 CAPLUS  
DOCUMENT NUMBER: 105:190736  
TITLE: Total synthesis of antitumor agent AT-125,  
( $\alpha$ S,5S)- $\alpha$ -amino-3-chloro-4,5-dihydro-5-  
isoxazoleacetic acid  
AUTHOR(S): Baldwin, Jack E.; Cha, Jin K.; Kruse, Lawrence I.  
CORPORATE SOURCE: Dyson Perrins Lab., Oxford, OX1 3QY, UK  
SOURCE: Tetrahedron (1985), 41(22), 5241-60  
CODEN: TETRAB; ISSN: 0040-4020  
DOCUMENT TYPE: Journal  
LANGUAGE: English  
OTHER SOURCE(S): CASREACT 105:190736  
GI



AB A short and efficient total synthesis of racemic AT-125 (erythro-I) and racemic threo-I proceeds via an intramol. Michael cyclization of HONR<sub>2</sub>COCH<sub>2</sub>CH: C(CO<sub>2</sub>R<sub>1</sub>)NHCO<sub>2</sub>CH<sub>2</sub>Ph (R = 4-MeOC<sub>6</sub>H<sub>4</sub>CH<sub>2</sub>, R<sub>1</sub> = CH<sub>2</sub>Ph; R = R<sub>2</sub> = H). Separation of diastereomers and deprotection to erythro-I followed by enzymic

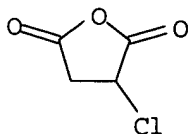
resolution of the N-chloroacetamide with hog-kidney acylase provides ( $\alpha$ S,5S)-I.

IT 1192-71-8P

RL: RCT (Reactant); SPN (Synthetic preparation); **PREP** (**Preparation**); RACT (Reactant or reagent) (preparation and esterification of)

RN 1192-71-8 CAPLUS

CN 2,5-Furandione, 3-chlorodihydro- (9CI) (CA INDEX NAME)



L7 ANSWER 2 OF 3 CAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER: 1983:557799 CAPLUS

DOCUMENT NUMBER: 99:157799

TITLE: Preparation of monomethyl fumarate

AUTHOR(S): Dymicky, Michael

CORPORATE SOURCE: East. Reg. Res. Cent., Agric. Res. Serv., Philadelphia, PA, 19118, USA

SOURCE: Organic Preparations and Procedures International (1983), 15(4), 233-8

CODEN: OPPIAK; ISSN: 0030-4948

DOCUMENT TYPE: Journal

LANGUAGE: English

OTHER SOURCE(S): CASREACT 99:157799

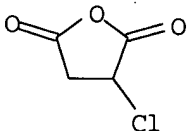
AB Monomethyl maleate (I), which was prepared, was catalytically isomerized to monomethyl fumarate (II); HCl, AlCl<sub>3</sub>, and acyl chlorides were used as catalysts. Thus, fumaric acid reacted with ClCOCOCl to give maleic anhydride and chlorosuccinic anhydride, and the maleic anhydride was treated with MeOH to yield I. Mixts. of I and a catalyst were heated to 80-5° to give apprx.82-5% II.

IT 1192-71-8P

RL: SPN (Synthetic preparation); **PREP** (**Preparation**) (preparation of)

RN 1192-71-8 CAPLUS

CN 2,5-Furandione, 3-chlorodihydro- (9CI) (CA INDEX NAME)



L7 ANSWER 3 OF 3 CAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER: 1972:462087 CAPLUS

DOCUMENT NUMBER: 77:62087

TITLE: Reaction of phosphorus(III) acid chlorides with conjugated heteroatomic systems

AUTHOR(S): Pudovik, A. N.; Khairullin, V. K.; Shagidullin, R. P.; Sobchuk, T. I.; Eliseenkov, V. N.; Vasyanina, M. A.

CORPORATE SOURCE: Inst. Org. Fiz. Khim. im. Arbuzova, Kazan, USSR

SOURCE: Khim. Primen. Fosfororg. Soedin., Tr. Vses. Konf., 3rd (1972), Meeting Date 1965, 220-30. Editor(s): Kabachnik, M. I. "Nauka": Moscow, USSR.

CODEN: 25HKAU

DOCUMENT TYPE:

Conference

LANGUAGE:

Russian

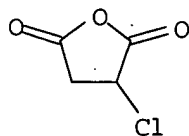
AB Heating  $\text{RPCl}_2$  ( $\text{R} = \text{Et}, \text{p-MeC}_6\text{H}_4$ ) with  $\text{R}_1\text{CH:CHCO}_2\text{H}$  ( $\text{R}_1 = \text{H}, \text{Me}$ ) gave the corresponding  $\text{RP(O) ClCHRCH}_2\text{COCl}$  in 37.0-80.5% yield;  $\text{CH}_2\text{:CMeCO}_2\text{H}$  (I),  $\text{HC.tplbond.CCO}_2\text{H}$ , and  $\text{MeO}_2\text{CCH}_2\text{CO}_2\text{H}$  reacted analogously, and I also gave the corresponding cyclic anhydride. Similarly,  $\text{RPClOR}_2$  (II,  $\text{R} = \text{Ph}, \text{p-MeC}_6\text{H}_4$ ;  $\text{R}_2 = 1\text{-trichloromethyl-1-cyclopentyl}, \text{CMe}_2\text{CCl}_3, \text{CH}(\text{CH}_2\text{Cl})_2$ ) and  $\text{CH}_2\text{:CR}_1\text{CO}_2\text{H}$  ( $\text{R}_1 = \text{H}, \text{Me}$ ) yielded the corresponding  $\text{R}_2\text{OP(O)RCH}_2\text{CHR}_1\text{COCl}$ , and II ( $\text{R}_2 = \text{CH}_2\text{CH}_2\text{Cl}, \text{Et}$ ) afforded the cyclic anhydrides. These products underwent reactions characteristic of their functional groups.

IT 1192-71-8P

RL: SPN (Synthetic preparation); **PREP (Preparation)**  
(preparation of)

RN 1192-71-8 CAPLUS

CN 2,5-Furandione, 3-chlorodihydro- (9CI) (CA INDEX NAME)



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